Robinson, Hannah J. (she/her/hers)

From: spdcomment
Sent: Friday, December 16, 2022 12:42 PM
To: Farquharson, Chenise
Subject: 2nd Further follow up to earlier response (Clarification on § 82.34 Prohibitions and required practices) & interest to distribute to iATNFW: EPA Section 609 Certified Equipment

Hi Chenise…pls see earlier inquiry from same person I forwarded (or see initial inquiry below) se (12/6/22)…

Thx much
Chinyere

From: Glenn Hartline (b) (6)
Sent: Sunday, December 11, 2022 9:23 AM
To: spdcomment <spdcomment@epa.gov>
Subject: Re: EPA Section 609 Certified Equipment

Good morning,

This is an update to my initial E-mail.

I would like to offer supporting documentation examples beforehand, so that whoever replies from the EPA can see that some research on the subject matter was done, and is highly relevant.

Please consider the following in its entirety:

Appendix A to Subpart B of Part 82 - Standard for Recycle/Recover Equipment

Recommended Service Procedure for the Containment of R-12

4. Service With Manifold Gage Set

4.1 Service hoses must have shutoff valves in the high, low, and center service hoses within 12 in (30 cm) of the service ends. Valves must be closed prior to hose removal from the air-conditioning system. This will reduce the volume of refrigerant contained in the service hose that would otherwise be vented to atmosphere.

4.2 During all service operations, the valves should be closed until connected to the vehicle air-conditioning system or the charging source to avoid introduction of air and to contain the refrigerant rather than vent open to atmosphere.

4.3 When the manifold gage set is disconnected from the air-conditioning system or when the center hose is moved to another device which cannot accept refrigerant pressure, the gage set hoses should first be attached to the reclaim equipment to recover the refrigerant from the hoses.

https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-82/subpart-B

Recovering Contaminated Refrigerants

Technicians must recover any contaminated or unfamiliar refrigerant before repairing or recharging an MVAC. EPA prohibits venting all automotive refrigerants, with the exception of carbon dioxide (R-744). The best way to recover contaminated or unfamiliar refrigerants is to dedicate a recover-only unit to impure refrigerants. Some equipment manufacturers also offer recover-only units designed to remove these refrigerants.

Some refrigerants might be contaminated with flammable substances such as propane and butane. Learn your equipment's safety features to guard against the risk of ignition.

Technicians should recover the refrigerant into standard U.S. Department of Transportation (DOT)-certified, gray-with-yellow-top recovery tanks. If the tank is not equipped with a float valve (which serves as overfill protection), make sure it is never filled beyond 60 percent of its gross-weighted capacity, as specified in the SAE J1989 and J2211 standards.

If MVAC service is not a large portion of your business, contact a nearby shop that may have the equipment necessary to recover contaminated refrigerants or unknown refrigerants.

https://www.epa.gov/mvac/handling-contaminated-automotive-refrigerants

R-1234yf Service Hose, Fittings and Couplers for Mobile Refrigerant Systems Service Equipment J2888_201902

This SAE Standard covers fittings, couplers, and hoses intended for connecting service hoses from mobile air-conditioning Systems to service equipment such as charging, recovery and recycling equipment. (Figure 1) This specification covers service hose fittings and couplers for MAC service equipment service hoses, per SAE J2843 and SAE J2851, from mobile air-conditioning systems to service equipment such as manifold gauges, vacuum pumps, and air-conditioning charging, recovery and recycling equipment.

https://www.sae.org/standards/content/j2888_201902/

MVAC Refrigerants

Unique Fittings

Each SNAP-approved refrigerant is required to be used with a unique set of fittings to prevent the accidental mixing of different refrigerants. These fittings are attachment points on the car itself, on all recovery and recycling equipment, on can taps and other charging equipment, and on all refrigerant containers. An adapter should not be used to convert a fitting.

https://www.epa.gov/mvac/epa-regulatory-requirements-mvac-system-servicing

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Unique fittings help protect the consumer by helping to protect the purity of refrigerant in their vehicle. For a list of the MVAC refrigerant unique fittings see "MVAC Refrigerants Fitting Sizes and Label Colors."

Applicability of Unique Fittings to Manifold Gauges and Refrigerant Identifiers

A standardized fitting may be used at the end of hoses attached to manifold gauges or a refrigerant identifier, but unique fittings must be permanently attached at the ends of the hoses that attach to MVAC system and servicing equipment.

Adapters for one refrigerant may not be attached and then removed and replaced with the fitting for a different refrigerant. The guiding principle is that once attached to a hose, the fitting is permanent and cannot be removed.

https://www.epa.gov/mvac/epa-regulatory-requirements-mvac-system-servicing

Again, with your permission, I would like to post the response/responses to the International Automotive Technicians Network (iATN) if you respond back that it is okay to do so.

Again, thank you in advance,

Glenn (H)

On Fri, Dec 9, 2022 at 3:23 PM Glenn Hartline (b) (6) wrote:

> Good evening,
>
> I am writing to get information that has been discussed among profession technicians of the International Automotive Technicians Network (iATN) regarding the following from the EPA:
>
> Note: the following pertains only to circumstances where “service for consideration’ is an element, and the technician/business is receiving compensation..
>
> “Section 609 requires that Technicians use refrigerant handling equipment that has been certified by the EPA or an independent standards testing organization approved by EPA to certify equipment.”
>
> Technicians are aware that the all-in-one types of RHSes/ACSes must be certified by the EPA. That is not in question.
>
> The question surrounds use of non-certified equipment (as indicated in the link below) for various reasons such as the following:
>
> A knowledgeable technician/business that has an RHS/ACS (certified), but uses other proper dedicated equipment such as in the following link to add to and aid in servicing, repairing, and diagnosing MVAC systems (that would not be considered venting) should be able to use such equipment professionally.
>
> https://www.trutechtools.com/trutech-tools-complete-vacuum-recovery-and-commissioning-kit.html
>
> The use of such equipment in the above link is highly relevant to servicing, repairing, and diagnosing MVAC systems, the same as other industries (properly used and refrigerant contained).
>
> To add to that, EV vehicles and heat pump vehicles need more than an RSH/ACS can offer. Equipment such as the additional non-certified equipment mentioned in the link above can be critical in many cases.
>
> No one is saying that technicians and repair facilities should be without an RHS/ACS, but if the EPA is saying technicians can never-ever use anything else (period), technicians will not be able to do their jobs properly, efficiently, and professionally.
>
> Another example:

Part of the lengthy argument/discussion at iATN surrounds that when systems are contaminated where a technician/business would not want to ruin/contaminate an expensive refrigerant handling system (RHS), a certified recovery unit, along with other non-certified equipment can be used that would not violate EPA rules and regulations when following all rules and regulations to prevent refrigerant release/venting. Such equipment would include a proper certified recovery machine, tank, and gauges for the proper refrigerant, as well as a collection/reclamation facility if/when necessary.

Example:

https://rotunda.service-solutions.com/en-US/Pages/ItemDetail.aspx?SKU=023-25700#:~:text=The%20Robinair%2025700%20is%20a%20contaminated%20recovery%20only,the%20Contaminated%20Refrigerant%20Tank%20Assembly%20%28Part%20%23%20023-17990%29.

The reason for this E-mail is that one of the iATN technicians has contacted the EPA and the EPA person wrote back, "the use of a vacuum pump, scale, and manifold, etc. would be a violation of the requirements at 40 CFR 82:26 to use EPA approved equipment when servicing motor vehicle air conditioners for consideration (i.e., payment in any form)."

Maybe the question posed to the EPA representative was not clear.

However, if that is the case: Can you please explain how a professional technician can handle any contaminated MVAC system without ruining/contaminating a very expensive RHS/ACS without using any other equipment, "including gauges," and so-forth that are not certified by the EPA. This would also include where moisture activation sealants would be detected within an MVAC system, and other maladies.

Is it a violation if using a certified RHS/ACS/Recovery machine and/or other equipment such as a proper dedicated gauge set where no venting (de-minimis release) is a factor?

Is it a violation if using a simple hook up of an expensive dedicated digital SMART manifold (gauge set) to diagnose an MVAC? And, while being used, is it a violation to use such professional equipment as in the following link?

https://www.trutechtools.com/trutech-tools-complete-vacuum-recovery-and-commissioning-kit.html

Is it a violation to use MVAC micron technology incorporated in using an RHS/ACS, including using expensive digital SMART manifolds (gauge sets) with such technology?

Is it a violation to use service port wireless pressure probes with remote data logging to transmit diagnostic information?

Is it a violation to use the following?

https://rotunda.service-solutions.com/en-US/Pages/ItemDetail.aspx?SKU=023-25700#:~:text=The%20Robinair%2025700%20is%20a%20contaminated%20recovery%20only,the%20Contaminated%20Refrigerant%20Tank%20Assembly%20%28Part%20%23%20023-17990%29.

Is it a violation to use the following including if the system has absolutely no refrigerant in it at all?

https://www.trutechtools.com/trutech-tools-complete-vacuum-recovery-and-commissioning-kit.html

Can you please elaborate if no other equipment can never-ever be used except an RRR/RHS/ACS; ever? (Basically, that is what is being interpreted by some MVAC technicians.)

There are many professional MVAC technicians using a host of equipment above and beyond any minimum standards that are necessary to do what needs to be done professionally. Technologies have surpassed many minimum standards, all inclusive without venting, as de-minimis).

If the above situations are EPA violations because no other equipment can never-ever be used except “certified refrigerant handling equipment,” and such non-certified equipment (such as gauge sets in contaminations and other situations) are not valid, please let me know.

Lastly, with your permission, I would like to post the response to the International Automotive Technician Networks (iATN) if you respond back that it is okay to do so.

Thanks in advance,

Glenn Hartline